

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,624	02/09/2006	Saleh Osman	PHUS020555	8882
65913 NXP, B.V.	7590 12/18/2007		EXAM	INER
NXP INTELLECTUAL PROPERTY DEPARTMENT			NGUYEN, HIEU P	
M/S41-SJ 1109 MCKAY	DRIVE		ART UNIT	PAPER NUMBER
SAN JOSE, CA 95131		2817		
			NOTIFICATION DATE	DELIVERY MODE
			12/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

		TH_				
	Application No.	Applicant(s)				
	10/538,624	OSMAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hieu P. Nguyen	2817				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a riod will apply and will expire SIX (6) MOI atute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 1	1/14//2007.					
·— · — —	•					
3) Since this application is in condition for allo	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) <u>1-20</u> is/are pending in the applicat 4a) Of the above claim(s) is/are withe 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-7, 9-10 and 13-20</u> is/are rejected 7) □ Claim(s) <u>8,11 and 12</u> is/are objected to. 8) □ Claim(s) are subject to restriction and	drawn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in A priority documents have beer reau (PCT Rule 17.2(a)).	Application No n received in this National Stage				
, ·						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application				

Application/Control Number: 10/538,624

Art Unit: 2817

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by **Tichauer** (U.S. 6,362,690).

Regarding claims 1-5 and 13-18, Tichauer discloses (see Fig. 2 and related text) an amplifier circuit/method comprising:

a driver stage (210) inherently having first active devices which receive a signal for preamplification and output a pre-amplified signal;

an output stage (202) inherently having second active devices which receive said preamplified signal for further amplification and output an amplified signal;

a detector (204) which measures levels of a forward signal and a reflected signal of said amplified signal; and

a control circuit (206) which independently controls turning on and off of said first active devices and said second active devices as a function of the forward signal level and the reflected signal level to substantially maintain linearity of said amplifier circuit with load variations, since Tichauer teaches (col. 4-5) that the controller 206 uses the device temperature information to

Application/Control Number: 10/538,624

Art Unit: 2817

reconfigure the amplifier stage 202 to either operate at a more benign operating condition or to shutdown when the device temperature exceeds a predetermined threshold, meeting claims 1-5, and 13-18.

Regarding claim 6, the circuit of Tichauer can be implemented using devices within the family of BJTs or FETs as mentioned in col. 4, lines 35-45, thus supporting the claimed limitation of "wherein said first active devices and said second active devices are NPN transistors", meeting claim 6.

Regarding claim 19, the circuit of Tichauer **inherently** supports the claimed limitation of "wherein the control circuit controls turning on and off of said first active devices and said second active devices as a function of the forward signal level and the reflected signal level by comparing the forward signal level to the reflected signal level", since the "WSWR" is determined by the controller 206, **meeting claim 19**.

Claims 1-2, 13-15 and 20 are also rejected under 35 U.S.C. 102(b) as being anticipated by **Shibamura** (U.S. 6,556,815).

Regarding claims 1 and 13-15, Shibamura discloses (see Fig. 1-2 and related text) an amplifier circuit/method comprising:

a driver stage (2A) inherently having first active devices which receive a signal for preamplification and output a pre-amplified signal;

an output stage (2b) inherently having second active devices which receive said preamplified signal for further amplification and output an amplified signal;

a detector which measures levels of a forward signal and a reflected signal of said amplified signal; and

Application/Control Number: 10/538,624

Art Unit: 2817

a control circuit (numerals 5/6) which controls turning on and off of said first active devices and said second active devices as a function of the forward signal level and the reflected signal level to substantially maintain linearity of said amplifier circuit with load variations, meeting claims 1 and 13-15.

Regarding claim 2, the circuit of Shibamura supports the claimed limitation of "wherein said output stage is coupled to a load without an isolation device between said output stage and said load" as mentioned in col. 1, lines 46-49, meeting claim 2.

Regarding claim 20, the circuit of Shibamura supports the claimed limitatation of "wherein the control circuit controls turning on and off of said first active devices and said second active devices as a function of the forward signal level and the reflected signal level by comparing the forward signal level and the reflected signal level with at least one reference value" as shown in Fig. 1-2, meeting claim 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tichauer**.

Regarding claim 7, Tichauer discloses the circuit in a broad sense and being silent about the claimed "input matching circuit". However it would have been prima facie obvious to one of Application/Control Number: 10/538,624 Page 5

Art Unit: 2817

ordinary skill in the art at the time the invention was made to implement a matching circuit (e.g. capacitor(s)) at an input, an output or between stages to reduce power consumption, meeting claims 7 and 9-10.

Allowable Subject Matter

Claims 8 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu P. Nguyen whose telephone number is 571-272-8577. The examiner can normally be reached on M-F: 8 A.M - 5P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hieu Nguyen AU: 2817 Robert Pascal Rrimary Examiner